

REMARKS

Claims 7-12 remain pending in this application. Claims 7 and 11 were amended to better clarify the claim terminology. No new matter has been introduced as a result of the amendment.

The drawings were objected to because FIG. 1 did not have the designation of "prior art". Furthermore, the Examiner objected to the use of reference "A" in FIGs. 1-2. In light of the present amendments to the drawings, Applicant has addressed these objections and submits the objection be withdrawn.

Claims 7 and 11 were rejected under 35 U.S.C. §112(2) as being incomplete for omitting essential structural cooperative relationships of elements amounting to a gap between the necessary structural connections. Applicant respectfully traverses this rejection.

To better explain the claim language, Applicant will refer to the exemplary embodiment of FIG.2, where the central network element feeds the respective working signals (WWL, WWR) into the first and second parts of the ring network. Thus, a working signal WWL is fed into a first part, while a second working signal WWR is fed into a second part. Based on the specific feed of each working signal, a working signal protection signal (PWL, PWR) is fed to a respective *other* part of the ring network. Under the example, since WWL was fed into a first part, the corresponding protection signal PWL would be fed into the second part. Likewise, since WWR was fed to a second part, the corresponding protection signal PWR would be fed into the first part. Under the claimed configuration, the protection signals would be fed into an other part, regardless of which part (first or second) the working signal was fed into. If the Examiner has further questions regarding the configuration, Applicant invites the Examiner to contact the undersigned attorney for further clarification.

Claims 4-6 were rejected under 35 U.S.C. §103(a) as being unpatentable *Cadeddu et al.* (U.S. Patent 5,647,035) in view of *Hauris et al.* (U.S. Patent 5,517,498). The Applicant traverses the rejection. Favorable reconsideration is respectfully requested.

Specifically, *Cadeddu* fails to teach a ring network "wherein the central network element feeds the working signals into the first and second parts of the ring network; wherein the central network element, in accordance with portions of the working signals fed into the first and second

parts of the ring network, feeds the working signals as protection signals into the respective other part of the ring network" as recited in claim 7 and similarly recited in claim 11.

As explained above, invention forms a loop network which is divided into a first part and into a second part whereby, proceeding from a central network element, respective working signals are fed into the first and second part of the loop network. Protection signals are led past the network elements of the other part of the loop up to the network element closing a loop half to the working signals. The protection signals, on the basis of the network element closing the loop half, are subsequently forwarded to the central network element opposite with respect to the working signals. The loop network, proceeding from the central network element, is divided into a first part R and into a second part L.

The cited art, alone or in combination, does not teach that a central network element A feeds working signals into the first part of the loop network and protection signals (correspond to the working signals) into the second part whereby the protection signals are respectively fed at the network element D, E closing the first and second part of the loop network into the respectively other closing network element of the second and first part of the loop network. Therefore, the protection signals are forwarded to the central network element *against the transmission direction* of the working signals.

Cadeddu teaches a loop network, however this loop network does not have a central network element from which the main traffic proceeds in the manner recited in the claims above. *Cadeddu* discloses a loop network whereby a steady traffic volume occurs between the network nodes 2a to 2f. The protection capacity provided in the loop network is shared by all network sections (Shared Protection Ring). In the case of a disturbance, space switches 11 a, 11 b, 12a, 12b are provided for switching the optical signals. Furthermore, the arrangement in the prior art only discloses a protection with respect to the optical connection but not a protection with respect to the switches 11a, .. 12b and the interface RX, TX, which is provided for in the configuration of the present claims.

Hauris et al. discloses a system for enabling traffic between groups of network nodes. This loop network also does not have a central network either from which the main traffic proceeds in the manner claimed above. Furthermore, *Hauris* is completely silent regarding the feeding of protection signals.

The present disclosure deals with a signal transmission from a central network element A to a network element B, ..., G (see FIG. 2). The present disclosure is not directed to a Shared Protection Ring but to a Path Protection on the tributary signal level. As a result, not only are the optical connections protected, but also all of the network elements including the optical interface. Furthermore, a space switch is not necessary under the disclosed embodiments since the protection occurs on the path level (electrical level). This means that the working signal and also the protection signal is supplied to each network element. After the switching stage on the tributary level, the network element selects the signal which has the better quality of the two signals. These teachings are not present in any of the cited references.

For at least these reasons, claims 7-12 are in allowable form, and an early Notice of Allowance is earnestly requested.

A petition for a one-month extension, along with a check in the amount of \$110 is hereby enclosed. If any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number (0112710-0178) on the account statement.

Respectfully submitted,

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